

25

General Dwyer
Greenock Dhd.

No. 446.

✓

EMPIRE RAY

RECORDS DEPT.,
LONDON.

32



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Foundation

003429-003433-0196

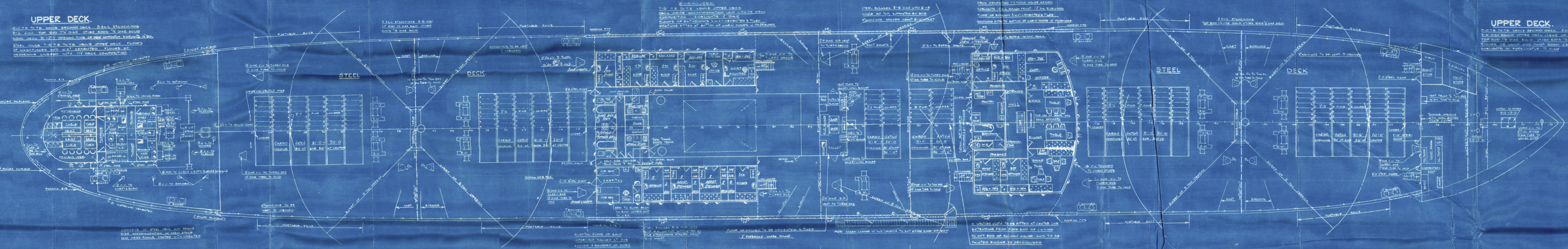
25

S.a.

446

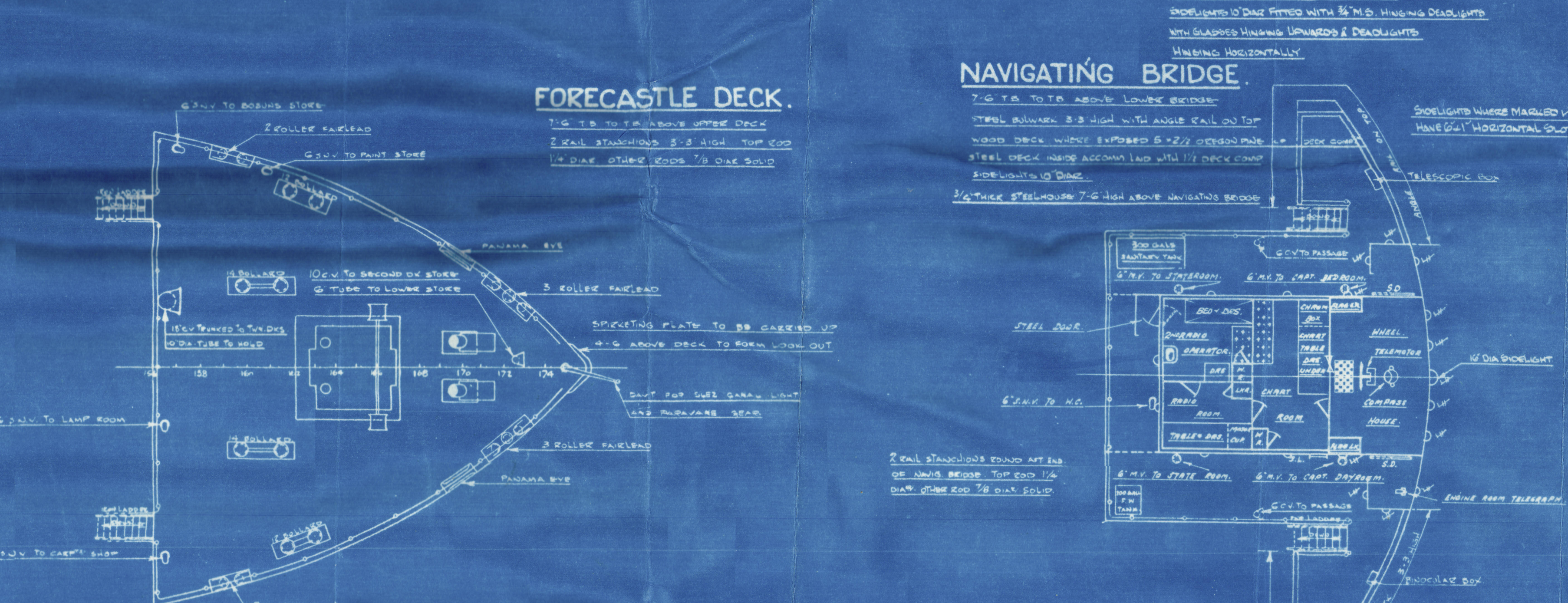
2" G TOP OF BEAM TO TOP OF BEAM AND
UPPER DECK
2" WALL STANDINGS 2" A GUS TOP GUS
1/4" DIA BOTTOM ROD 1/4" DIA

2. JOIST 7-0/16 TOTAL WHITE UPPER DECK FLOOR
WASHERS AND W/2 GEMBITED FLOORS OF
SHEATH COVERED WITH 1/2 DECK COMPOSITION

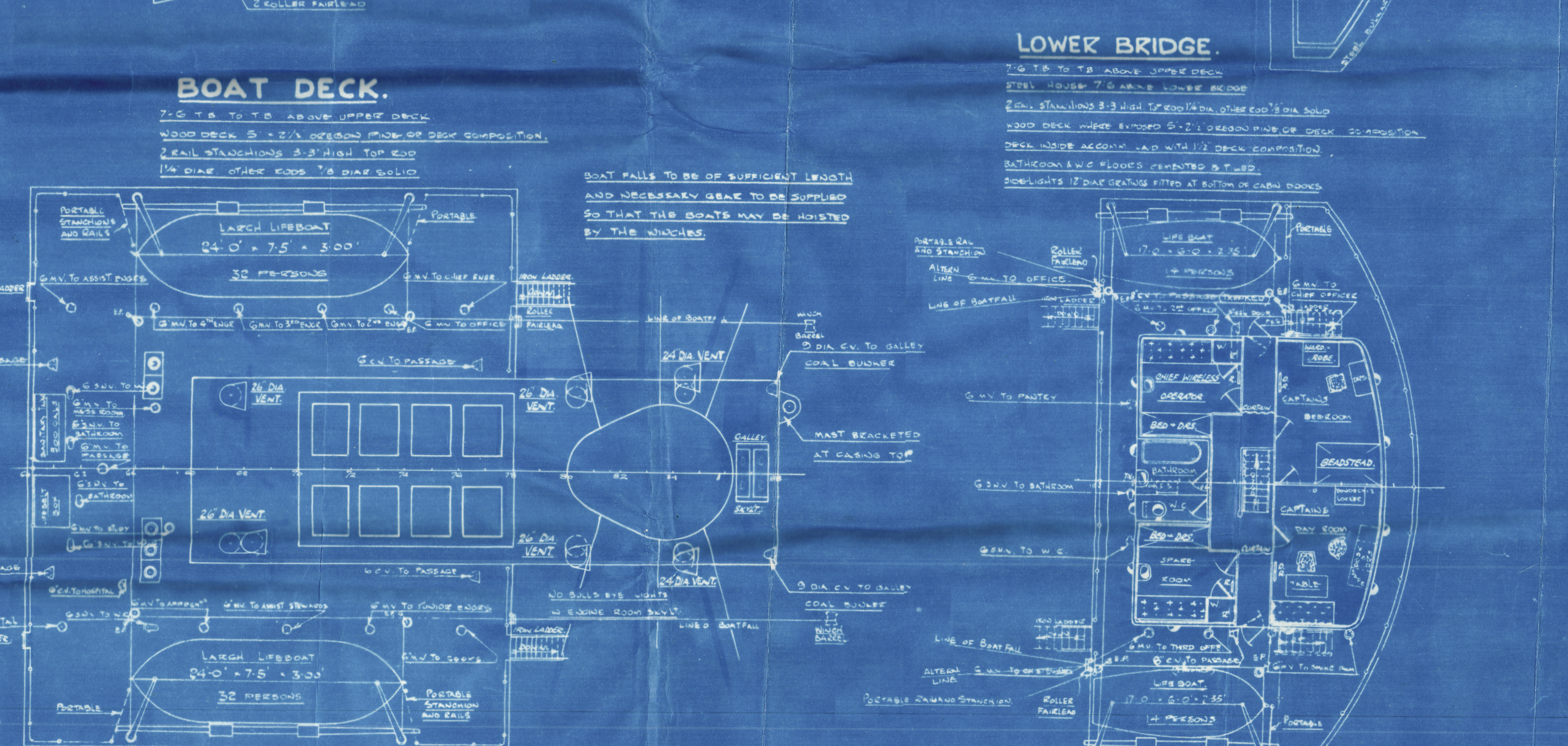


2.0 * 8 TO 15 BETWEEN JUMPS & SECOND DECK
DECK WERE ACCOMMODATION LAY WITH 1/2 DECK COMPOSITION
SOLICITED 10 PAIR LOCKER FITTED TO EACH VENTILATOR
TO CELEB FOUR & APT BULKHEADS NOW AT TOP 2 CELEB
ACCOMMODATION

DIMENSIONS:- 425'-0" BP (ON WL) x 56'-0" MLD x 27'-9" MLD TO 2ND DK x 36'-9" MLD TO UPPER DK

[illegible]

7/6 T6 TO T8 ABOVE LOWER BEAM
 STEEL JOIST 7/6 ABOVE LOWER BEAM
 2 CH. STAINLESS STEEL TYPHOID RODS 7/8 DIA. 24 IN.
 2000 BEAM HIGHER STIMUL 5/2 1/2 OAKEN END OF BEAM 20 ANGLE
 BEAM HIGHER ACCORD. 1/4 IN. 1/2 1/2 IN. 1/2 IN. 1/2 IN. 1/2 IN.



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Profile Deck
Greenock Dkd.
Nos 446-7. ✓

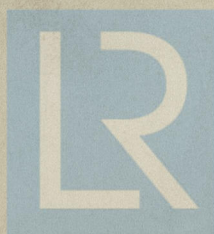
EMPIRE RAY

" " STANLEY

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RETAIN



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MOS 114 & 115 MV "EMPIRE RAY" & MV "EMPIRE STANLEY" PROFILE & DECKS

SCALE 1/8"=1'-0"

DIMENSIONS

425'0" BODEN LVL x 56'0" MLD BTH

MLD DEPTH TO SECOND DECK 27'9"

MLD DEPTH TO UPPER DECK 36'10"

TO CLASS B.S. * WITH FREEBOARD.

SCANTLING NUMERALS

1" LONGITUDINAL NUMBER LND = 425 x 3575 = 1519375

2" LONGITUDINAL NUMBER L(B-D) = 425 (56-3575) = 3899375

L/D TO UPPER DECK = 425 x 3675 = 11154

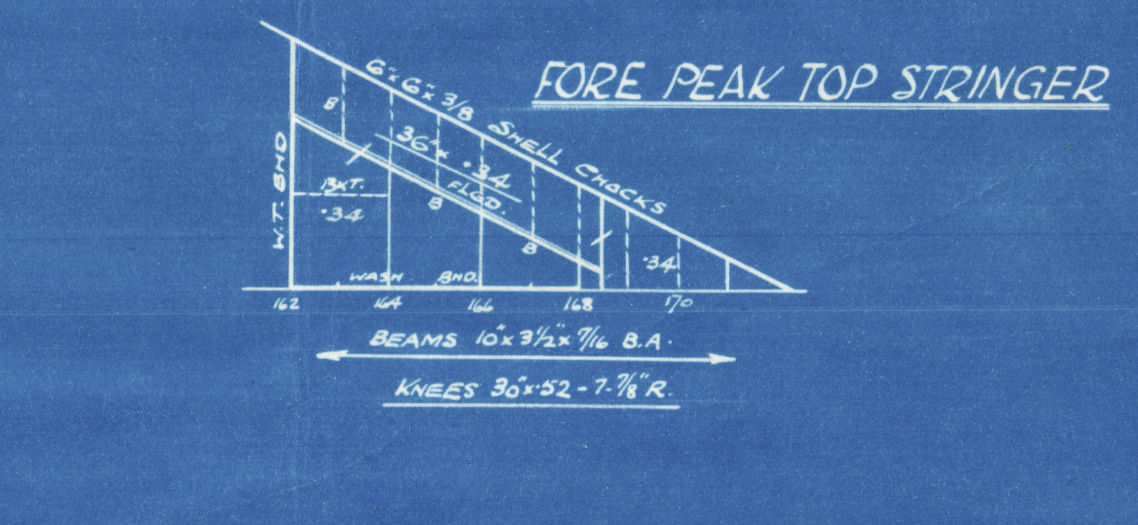
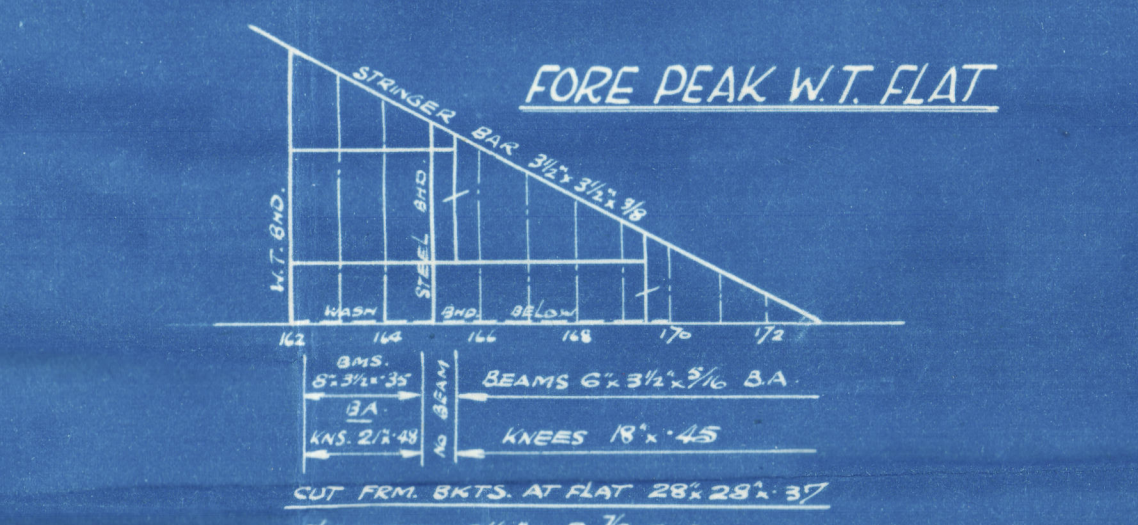
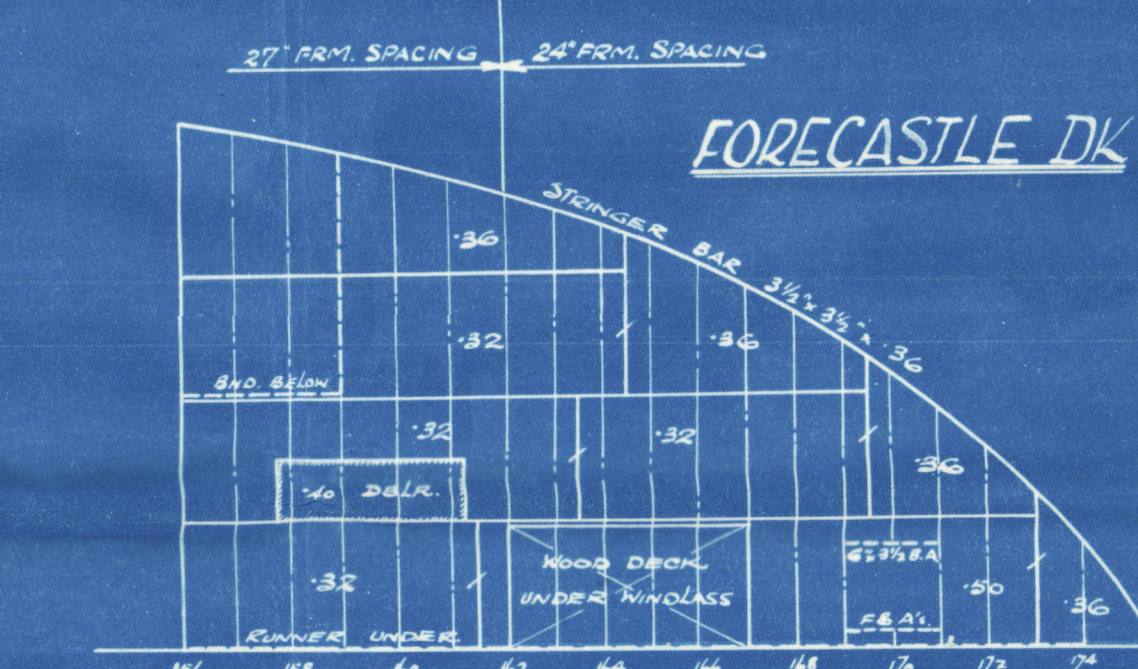
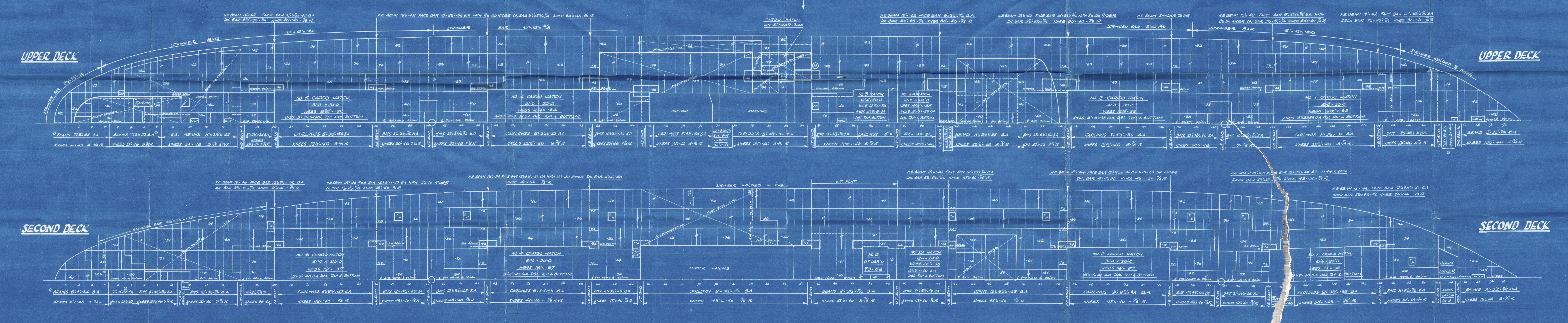
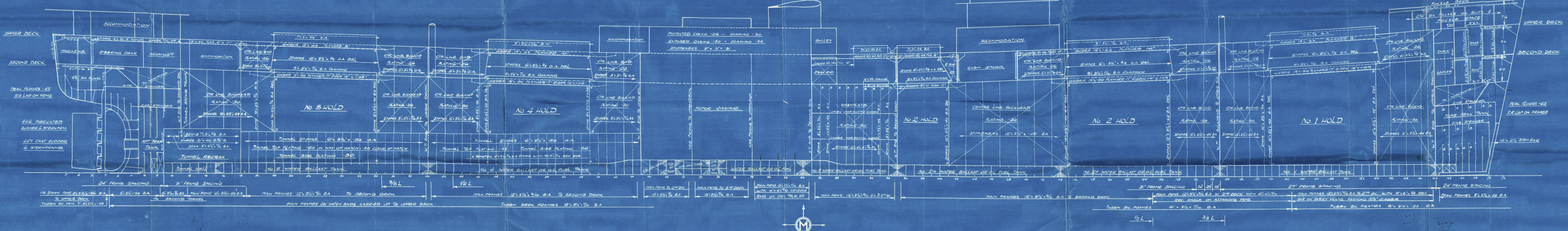
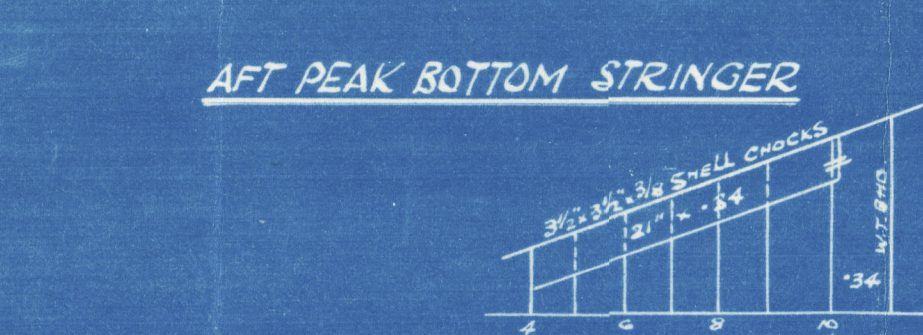
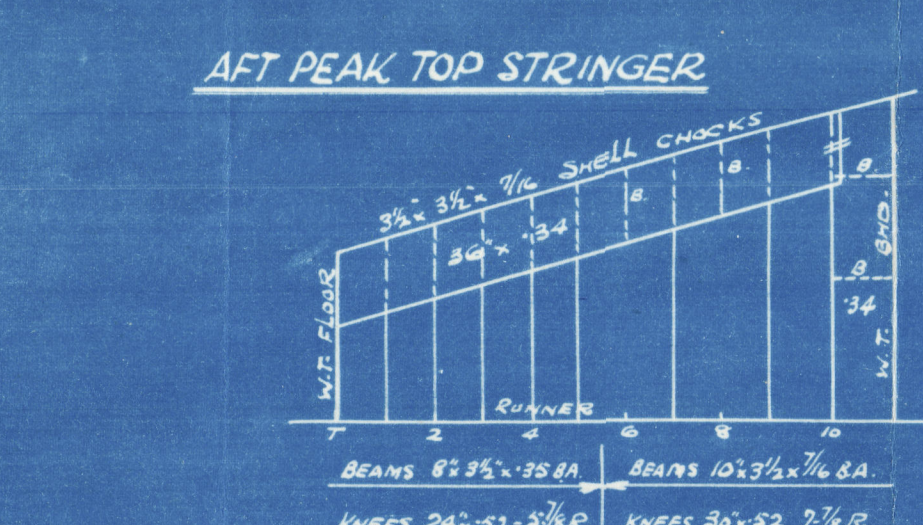
D MOULDED DEPTH = 2775 - 3 = 2772

CL = 3675 - (9 x 375) = 3300

CL AT HALF LENGTH FORWARD = 2030

ALL SECTIONS INDICATED ARE N.B.S.

WARD NOS FOR SHIPS ARE 446 & 447 RESPECTIVELY. SCANTLING FOR BOTH ARE SIMILAR EXCEPT AT UPPER DECK BEAMS F.2 & 1/3" & 1/4" WHICH ARE 8/16" & 1/2" AND AT 2" DECK BEAMS F.2 & 1/3" WHICH ARE 8/16" & 1/2" WHICH ARE 5/8" & 1/2" IN 447.



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Midship Section. [AS BUILT]

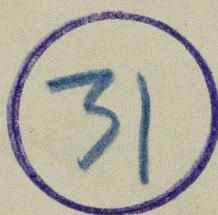
Greenock Shd. Co.

Nos. 446-7

EMPIRE RAY

" " STANLEY.

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"^u
KING ALFRED

MODIFICATION TO BULKHEAD 85

CARRIED OUT AT S.S. (C) 3/59.

GREENOCK REPORT N^o 26342.

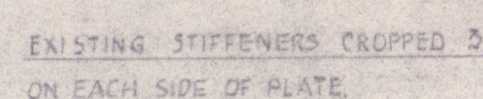
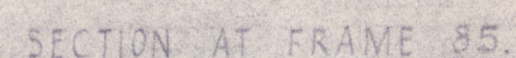
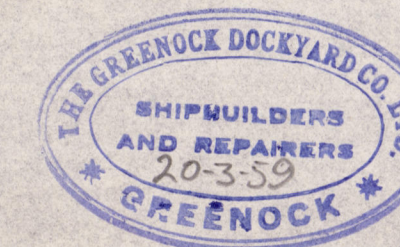


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SCALE ~ 1/4" = ONE FOOT



12" B.A. AT FRM 86
PLATING LAPPED 4"
TO FRAME & WELDED

THIS PORTION DRAWN
AT FRAME 86

PIPING IN CIRCLED AREA TO BE ALTERED
TO SUIT MODIFICATION.

BULKHEADS 85 & 86
LOOKING AFT
EXISTING STIFFENERS 8' 3 1/2" 35 B.A.
ADDITIONAL STIFFENERS 8' 40" O.S.B.P.

ELEVATION IN WAY OF ADDITIONAL STIFFENERS

- (1) 493 / BR 7 ~ 3 @ 22.6 - 49 34 ~ CUTS 3 @ 67 - 48 - 34
(2) 493 / JEE 78A ~ 1 @ 13.11 - 55 - 51 ~ CUTS 2 @ 67 - 54 - 51
(3) 493 / SC 2 ~ 1 @ 16.9 - ^{60%} 52% 55 ~ CUTS 2 @ 70 - 58 - 55
(4) 493 / EP 9 ~ 1 @ 14.0 - 75 - 44 ~ CUTS 2 @ 114 - 31% 44
(5) 491 / TA 5 ~ 1 @ 11.0 - 74% 40 ~ CUTS 2 @ 110 - 31% 46
(6) 493 / MDC 13 ~ 1 @ 11.4 - 36 - 48 ~ CUTS 1 @ 114 - 31% 48
493 BR 12 ~ 1 @ 16.0 - 67 - 39
493 EG 7 ~ 2 @ 10.0 - 55 - 43 } CUTS ALL TRIPS BUTS
492 UDD 21 ~ 2 @ 16.4 - 37.2 - 43

THIS FRAME TO BE
COLLARED P & S.

PLAN VIEW AT BOTTOM STRINGER

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Fabricated Sternframe

Greenock Dhd. Co.

Nos. 445-7

COPY OF PLAN
APPROVED.
27.5.40.

EMPIRE RAY

" " STANLEY.

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Fabricated Sternframe
Greenock. Dhd. Nos 445-6

20 APR 1945

No 445 G FABRICATED STERNFRAME.

SCALE: 1" = ONE FOOT, DETAILS AS MARKED
No 445 TO LLOYDS, 446 TO B.C.

ALL WELDING TO BE CARRIED OUT TO SURVEYORS SATISFACTION
AT THE WORKS OF COLVILLE CONSTRUCTION CO., LTD. GLENHARROCK.

DETAIL AT TOP OF STERNFRAME

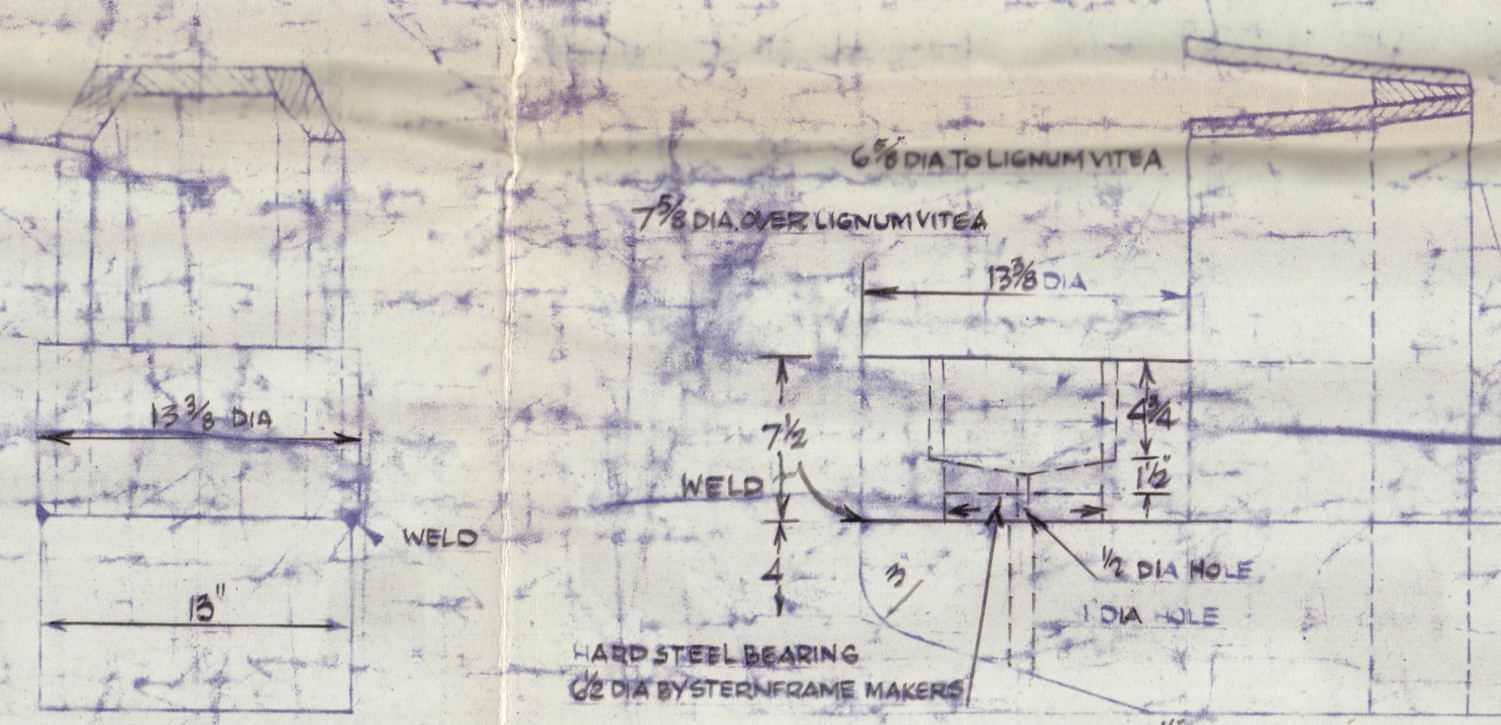
SHIPPING STERNFRAME INDENTING OUT TO ENVELOPE RUDDER POST



SECTION AT A-A
LOOKING FORWARD

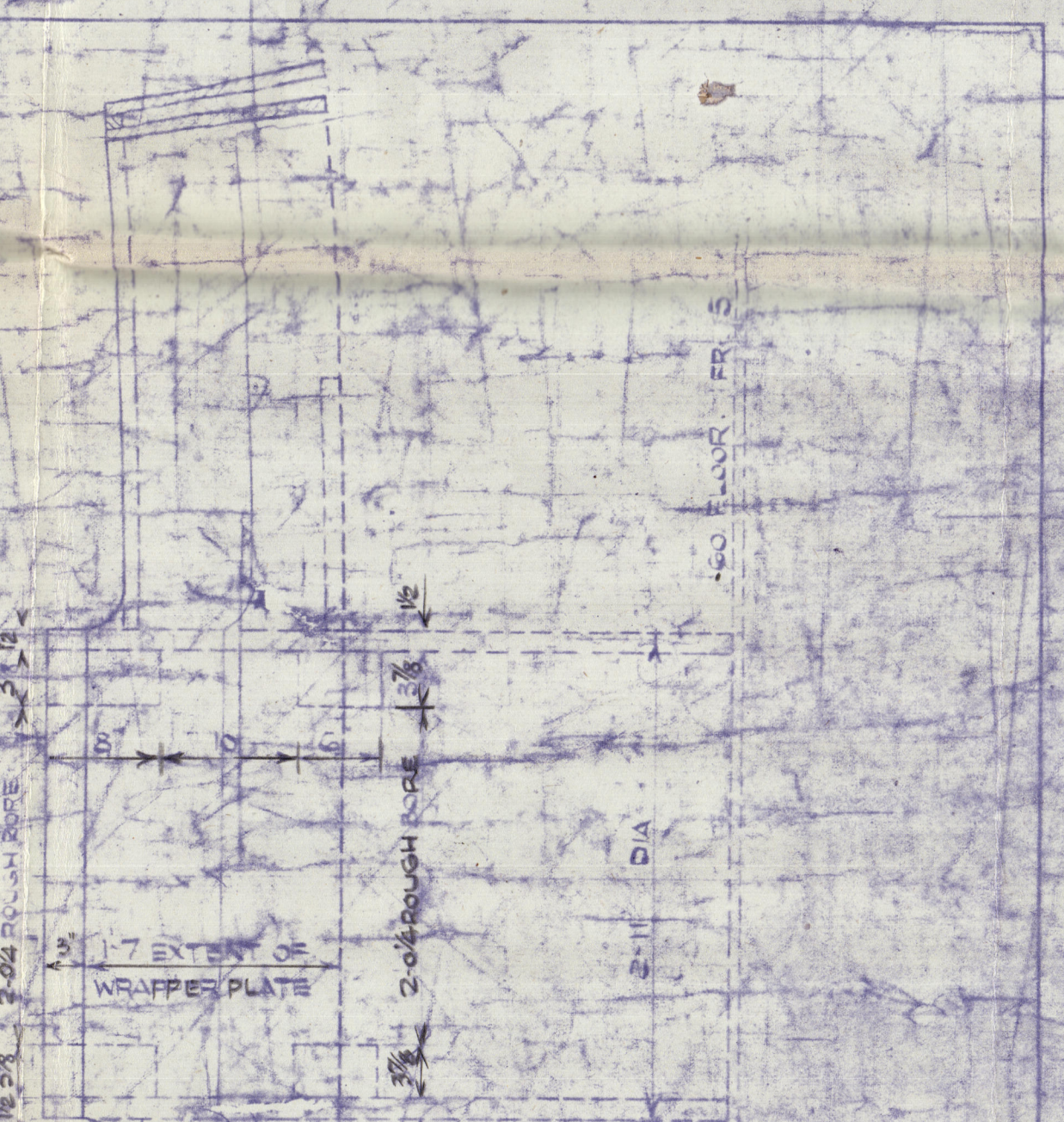
DETAIL IN WAY OF GLUGGEONS

SCALE: 1/2" = ONE FOOT



DETAIL OF BOTTOM RUDDER GLUGGEON

SCALE: 1" = ONE FOOT

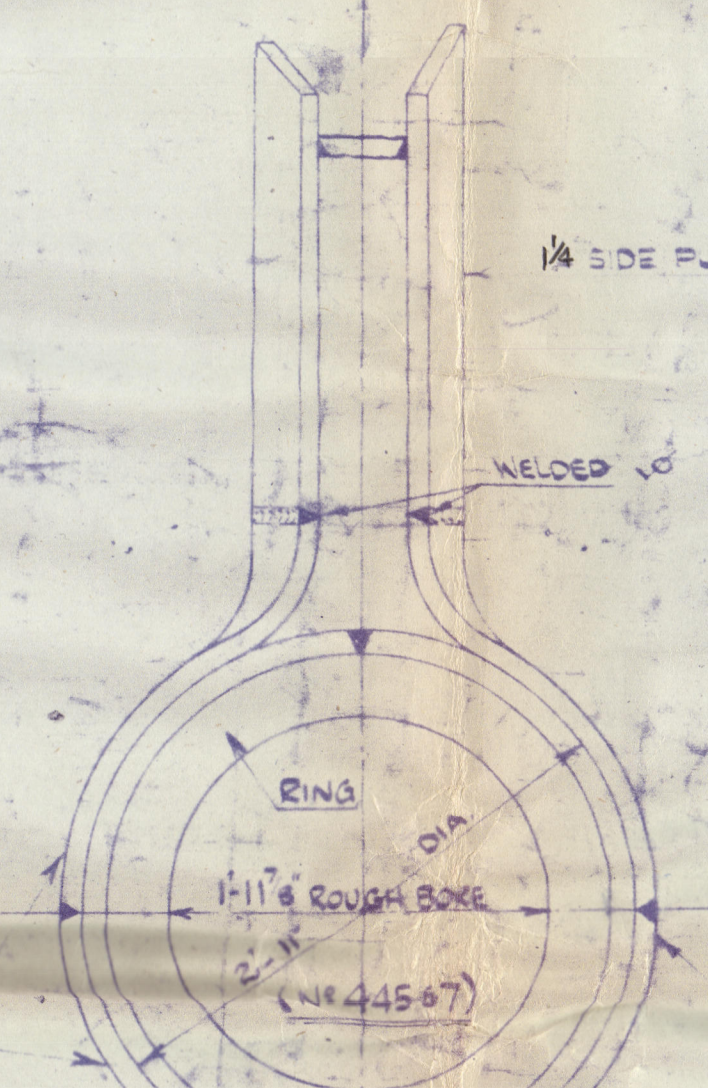


No 446 DETAIL OF BOSS PIECE



PLAN IN WAY OF BOSS PIECE

WEBS CAN BE CUT FROM SCRAP PLATING, MINIMUM THK 1"



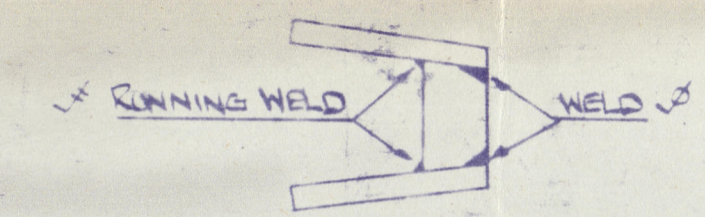
DETAIL LOOKING FORWARD ON BOSS PIECE

WELD TO BE DRESSED

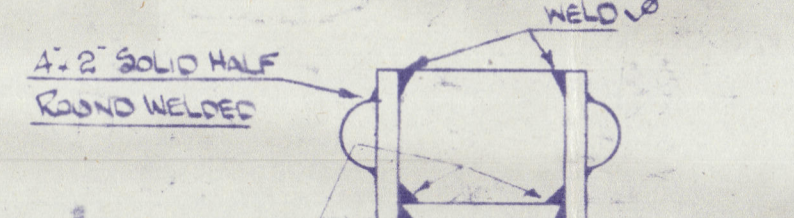
TOP OF SOLEPIECE

BOTTOM OF SOLEPIECE

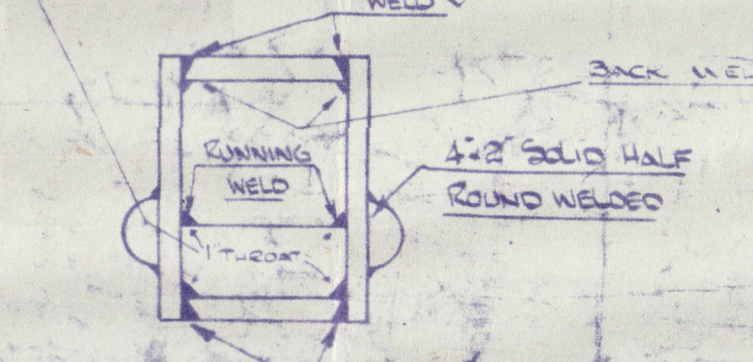
WELDING DETAILS



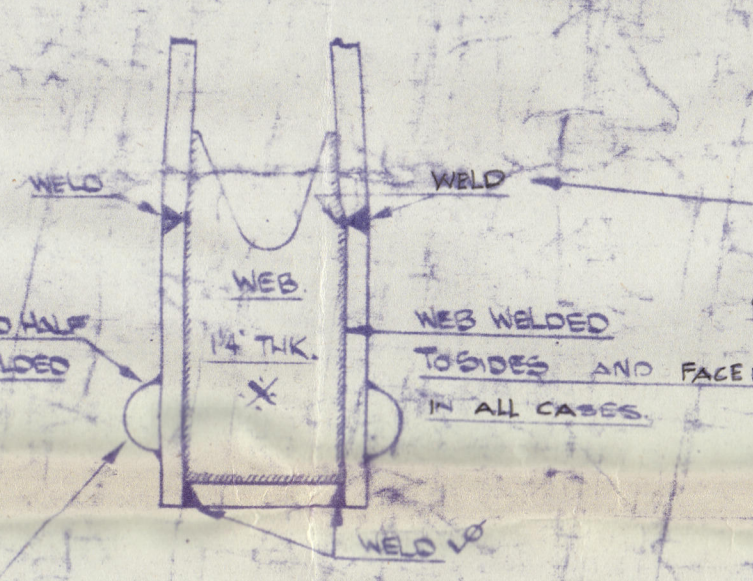
SECTION AT A-A



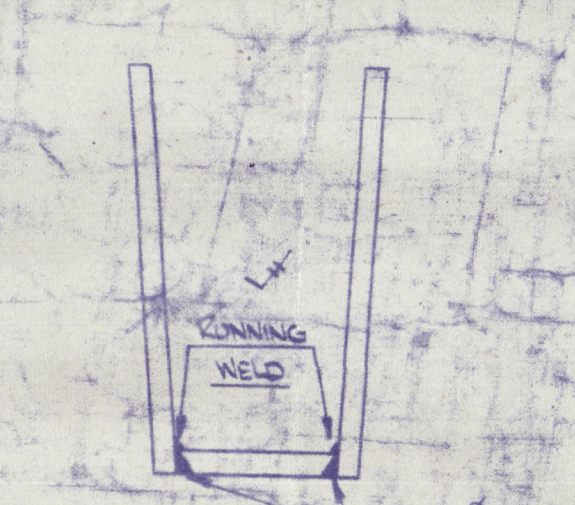
SECTION AT B-B



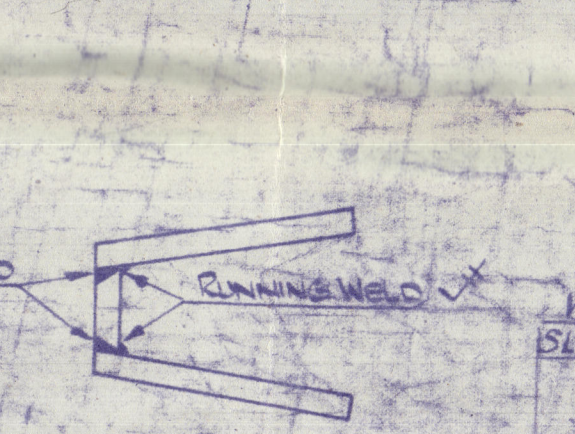
SECTION AT C-C



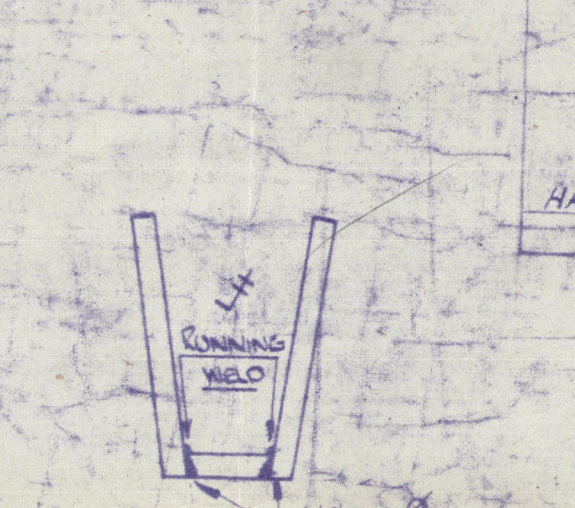
SECTION AT D-D



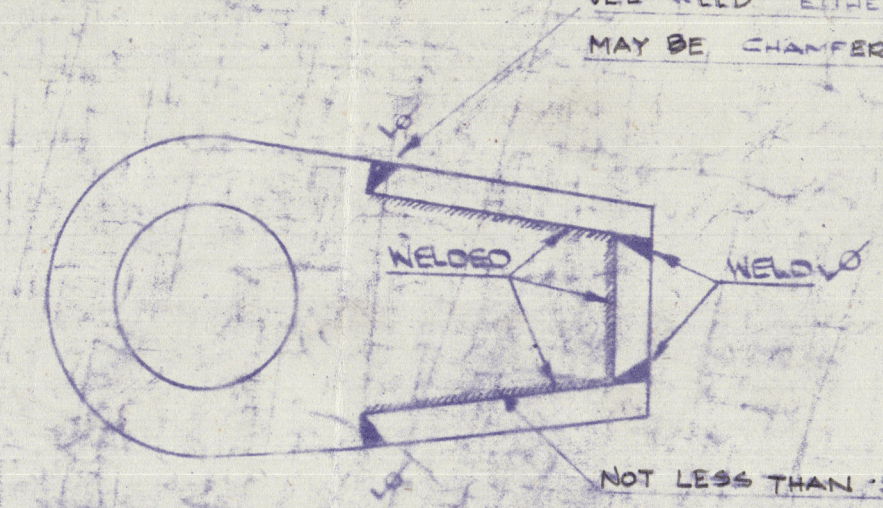
SECTION AT E-E



SECTION AT F-F



SECTION AT G-G



SECTION AT GLUGGEONS

WEIGHT OF FABRICATED STERNFRAME

ITEM	WEIGHT (LBS)
PLATE (Bot. Wing Pieces)	6.12
Sole Piece Bottom	1.12
Sole Piece	4.1
Core Plates	1.1
Bracket	0.1
Welds	0.1
TOTAL	16.2

16.2 LBS. = 3.54 TONS

1/4 TON = 250 LBS.

TOTAL 9.56 TONS

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⁴/₆ Fabricated Rudder

Greenock Shd. Co.

Nos. 446/7.

27.5.40

^PEMPIRE RAY ^{Stanley}

" " STANLEY.

RECORDS DEPT..
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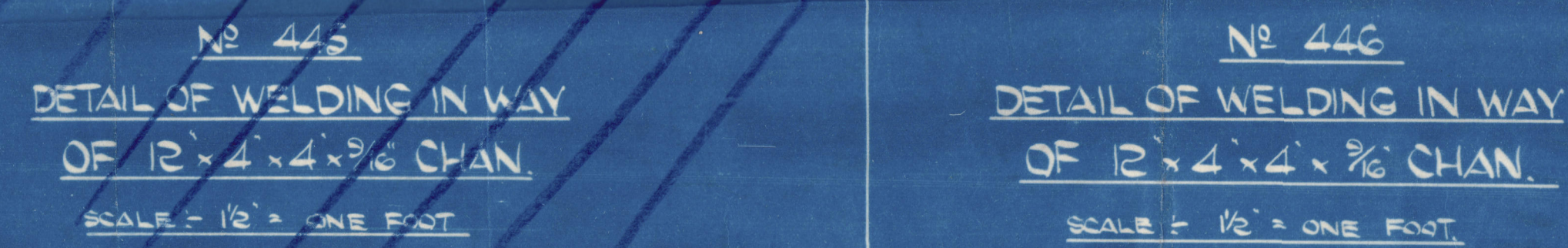
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DETAILS OF FABRICATED RUDDER.

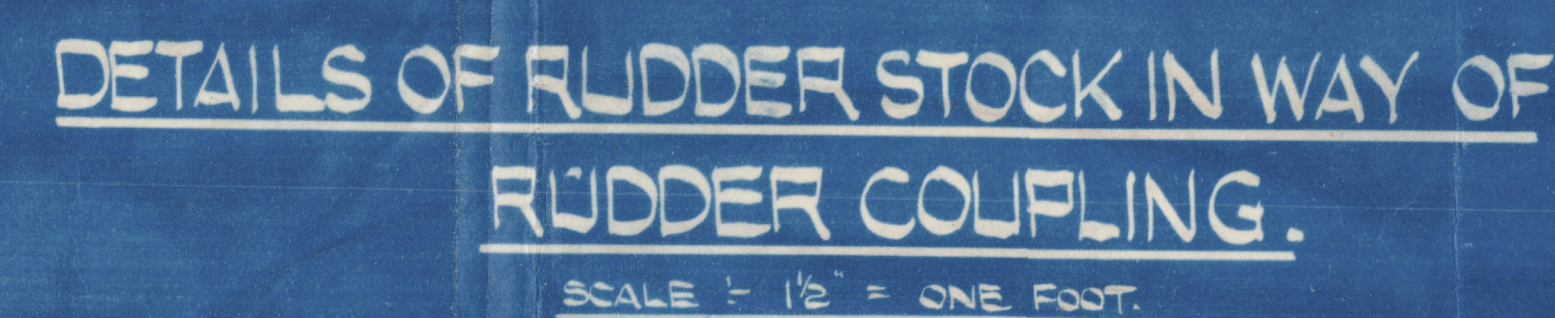
No 445 TO LLOYDS No 446 TO BRITISH CORPORATION.



HEIGHT OF DECK ABOVE BASE LINE OF SHIP	-	32'- 8 ⁵ / ₈ "
HEIGHT OF RUDDER STOCK ABOVE DECK	-	3'- 4 ⁵ / ₈ "
TOTAL LENGTH OF RUDDER ABOVE BASE	-	36'- 0 ⁵ / ₈ "
HEIGHT TO BOTTOM OF RUDDER STOCK	-	18'- 10 ⁵ / ₈ "
TOTAL LENGTH OF RUDDER STOCK	-	17'- 2 ⁵ / ₈ "

RUDDER STOCK TURNED TO GAUGES SUPPLIED.

SCALE: $1\frac{1}{2}" = \text{ONE FOOT}$



DETAIL OF BOTTOM
(BEARING) PINTLE
SCALE 1/4 FULL SIZE
DETAILS NOT INDICATED, SIMILAR
TO ABOVE.

DETAIL OF LIFTING EYE.

SCALE - 1/4 FULL SIZE.